

South Plains College - Reese Center Course Syllabus

COURSE: **RADR 1266-200 (2:0:16) Practicum – Radiologic Technology/Science-Radiographer**
SEMESTER: **Spring 2025**
TIMES: **T/Th 8:00am to 4:30pm or 3:00pm to 11:00pm**
INSTRUCTOR: **Erica Castillo**
OFFICE: **RC 512A**
OFFICE HOURS: **M-Th: 9:00am - 11:00am & M-F: by appointment**
OFFICE PHONE: **806-716-4628**
E-MAIL: ecastillo@southplainscollege.edu

“South Plains College improves each student’s life.”

GENERAL COURSE INFORMATION

It is the responsibility of each student to be familiar with the content and requirements listed in the course syllabus.

COURSE DESCRIPTION

This course consists of practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Direct and indirect supervision is provided by the clinical professional.

COURSE OBJECTIVES

The student will:

1. Assist in providing basic health care to the patient in the radiology department. (F6,15;C9,11,14)
2. Protect the patient from all unnecessary radiation, using the appropriate radiation protection procedures. (F6,8,12,16,17;C11,15,16,18,19,20)
3. Follow appropriate radiation protection procedures for the patient and occupational workers. (F6,8,12,16,17;C11,15,16,18,19,20)
4. Participate in radiographic procedures to achieve competency in the assigned discipline. (F1,5,6,7,8,9,16;C1,3,4,5,9,18)
5. Assist in the daily operation of the radiology department, to include (but not limited to): patient transportation, image processing, office and clerical duties as required. (F1,2,5,6,8,11,12,13,15;C4,9,15,18)

STUDENT LEARNING OUTCOMES

As outlined in the learning plan, apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry; and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry.

EVALUATION METHOD

Students are expected to maintain a grade average of **C (75)** in all Radiography classes in order to progress appropriately through the Radiography Program. Satisfactory completion of this course will assure the competency of the student in the assigned clinical area and provide correlation of classroom instruction with the clinical setting. This information will be reinforced through interactions with Radiologists, staff radiographers, and patients in the clinical sites. In addition, the Radiology department in-service programs are available to the students. Image analysis is conducted in the clinical setting and the classroom setting.

The student should make every effort to complete 25% of the total required clinical competencies by the end of this course. This includes routine and portable procedures in the following categories:

Abdominal, Thorax, Upper Extremities/Shoulder Girdle, Lower Extremities/Pelvic Girdle, Spine, Urinary, Gastrointestinal System, Nervous System, Special procedures, as well as the areas of equipment maintenance.

If during the semester the student is having difficulty accomplishing the appropriate procedures, it may be necessary to reassign the student in order for him/her to complete the required number of procedures.

GRADING CRITERIA FOR RADIOGRAPHIC PROFICIENCY

- 1) Was the student available at the time of request?
- 2) Did the student properly interpret the request?
- 3) Did the student properly prepare the room for the procedure?
- 4) Did the student correctly identify the patient?
- 5) Did the student correctly identify himself/herself?
- 6) Did the student conduct himself/herself in a professional manner?
- 7) Did the student obtain patient history and explain the procedure to the patient?
- 8) Did the student ask the female patient if there was a possibility she could be pregnant?
- 9) Did the student give proper dressing instructions?
- 10) Did the student safely transport the patient to and from the x-ray table?
- 11) Did the student effectively communicate instructions to the patient?
- 12) Did the student demonstrate proper patient care while attending the patient?
- 13) Did the student use the correct SID?
- 14) Did the student position the patient correctly?
- 15) Did the student use the correct central ray orientation and angle?
- 16) Did the student collimate to the area of interest?
- 17) Did the student use the appropriate IR size and orientation?
- 18) Did the student use the correct marker and place it appropriately?
- 19) Did the student properly shield the patient when possible?
- 20) Did the student correctly shield himself/herself and others from unnecessary radiation exposure?
- 21) Did the student use the technical factors appropriate for the procedure being completed?
- 22) Did the student complete the correct projections for the procedure?
- 23) Did the student demonstrate the desired anatomy on the processed radiograph?
- 24) Did the student produce a diagnostic study?

If a radiograph does not display a side marker, the radiograph will be repeated and no competency will be given to the student. Computerized/digital images must display a side marker. In the event the marker is not evident on the radiograph, the radiograph will be repeated. **If the supervising technologist prefers the image to not be repeated, the technologist must annotate the radiograph with their personal initials. Annotating the images post processing will not be allowed by the student.**

ACADEMIC INTEGRITY

It is the aim of the faculty of South Plains College to foster a spirit of complete honesty and a high standard of integrity. The attempt of any student to present as his or her own any work which he or she has not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences, possibly suspension.

Cheating - Dishonesty of any kind on examinations or on written assignments, illegal possession of examinations, the use of unauthorized notes during an examination, obtaining information during an examination from the textbook or from the examination paper of another student, assisting others to cheat, alteration of grade records, illegal entry or unauthorized presence in the office are examples of cheating. **Complete honesty is required of the student in the presentation of any and all phases of coursework.** This applies to exams of whatever length, final examinations, term papers, projects, **clinical data entry, clinical attendance, and clinical performance.**

Plagiarism - Offering the work of another as one's own, without proper acknowledgment, is plagiarism; therefore, any student who fails to give credit for quotations or essentially identical expression of material taken from books, encyclopedias, magazines and other reference works, or from themes, reports or other writings of a fellow student, is guilty of plagiarism.

If found cheating or plagiarizing, the student's future in this program will be based on the decisions from the Allied Health Departmental Director's Committee.

BLACKBOARD

Blackboard is an e-Education platform designed to enable educational innovations everywhere by connecting people and technology. This educational tool will be used in this course throughout the semester. **The student should only access his or her own Blackboard account. Granting permission to another or accessing another student's Blackboard account is prohibited and against the Academic Integrity code.**

SOCIAL MEDIA

Facebook: <https://www.facebook.com/spradtechprogram>

Instagram: <https://www.instagram.com/spradtech/>

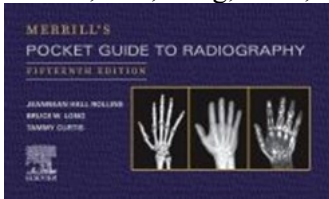
SCANS and FOUNDATION SKILLS

Refer also to Course Objectives. Scans and Foundation Skills attached

SPECIFIC COURSE INFORMATION

REQUIRED TEXT AND MATERIALS

Rollins, J.H., Long, B.W., Curtis, T., Merrill's Pocket Guide to Radiography. 15th Edition.



Lead Markers.

Any previously acquired textbooks may be used as reference sources as needed.

UNIFORMS

The student must follow the guidelines found outlined in the Program's student handbook. Any deviation from these guidelines will result in the student being asked to leave the clinical setting to correct the infraction. The student may return once the correction has been made. If the student must leave to correct the problem, the total time away from the clinical site will be included in the missed clinical time.

COMMUNICATION POLICY

Electronic communication between instructor and students in this course will utilize the South Plains College "My SPC" email systems and GroupMe. The instructor will not initiate communication using private email accounts. **Students should check their SPC email and GroupMe on a daily basis.**

CELL PHONES, SMARTWATCHES & OTHER ELECTRONICS

The student may clock in/out of Trajecsyst with his/her cell phone. Please refer to **Clinical Attendance Policies** for more detail regarding clocking in/out, of Trajecsyst with cell phone.

Once in the clinical facility, the student is not allowed to use/carry a cell phone, smartwatch, tablet, or any device capable of receiving messages. The cell phone should be left with the student's personal belongings (on silence, not vibrate) or in his/her car.

Personal cell phone use and phone calls should be made while on break or lunch. **If the clinical instructor/technologist observes that the student is using their cell phone, the first offense will be a written warning. For the second & all subsequent offenses, the student will be sent home for the remainder of the day, per semester.** Those missed hours will go against the total missed hours allowed for the semester. In case of emergencies, the student may also be contacted at his or her assigned clinical site. The clinical site contact information may be found in Blackboard and Trajecsyst.

STUDENT CONDUCT

Students in this class are expected to abide by the standards of student conduct as defined in the SPC Student Guide and the Radiologic Technology Clinical Student Handbook.

Rules and regulations relating to the students at South Plains College are made with the view of protecting the best interests of the individual, the general welfare of the entire student body and the educational objectives of the college. As in any segment of society, a college community must be guided by standards that are stringent enough to prevent disorder, yet moderate enough to provide an atmosphere conducive to intellectual and personal development.

A high standard of conduct is expected of all students. When a student enrolls at South Plains College, it is assumed that the student accepts the obligations of performance and behavior imposed by the college relevant to its lawful missions, processes and functions. Obedience to the law, respect for properly constituted authority, personal honor, integrity and common sense guide the actions of each member of the college community both in and out of the classroom.

Students are subject to federal, state and local laws, as well as South Plains College rules and regulations. A student is not entitled to greater immunities or privileges before the law than those enjoyed by other citizens. Students are subject to such reasonable disciplinary action as the administration of the college may consider appropriate, including suspension and expulsion in appropriate cases for breach of federal, state or local laws, or college rules and regulations. This principle extends to conduct off-campus which is likely to have adverse effects on the college or on the educational process which identifies the offender as an unfit associate for fellow students.

Any student who fails to perform according to expected standards may be asked to withdraw.

Rules and regulations regarding student conduct appear in the current Student Guide.

ATTENDANCE POLICY (*READ CAREFULLY*)

Clinical attendance is extremely important to the student radiographer's education. It is during this time that valuable experience is gained that is necessary for the development of radiographic skills. Missed clinical time, for whatever reason, compromises that educational experience. Being a health care provider requires commitment and professionalism, which is partially demonstrated by the student's attendance and punctuality in this course. Obviously, there are circumstances that will prevent attendance, such as in the case of illness or extreme emergency. Excessive absenteeism, regardless of the reason, makes it impossible to meet all the objectives of this course satisfactorily.

Students are expected to attend all classes in order to be successful in a course. The student may be administratively withdrawn from the course when absences become excessive as defined in the course syllabus.

When an unavoidable reason for class absence arises, such as illness, an official trip authorized by the college or an official activity, the instructor may permit the student to make up work missed. It is the student's responsibility to complete work missed within a reasonable period of time as determined by the instructor. Students are officially enrolled in all courses for which they pay tuition and fees at the time of registration. Should a student, for any reason, delay in reporting to a class after official enrollment, absences will be attributed to the student from the first class meeting.

Students who enroll in a course but have "Never Attended" by the official census date, as reported by the faculty member, will be administratively dropped by the Office of Admissions and Records. A student who does not meet the attendance requirements of a class as stated in the course syllabus and does not officially withdraw from that course by the official census date of the semester, may be administratively withdrawn from that course and receive a grade of "X" or "F" as determined by the instructor. Instructors are responsible for clearly stating their administrative drop policy in the course syllabus, and it is the student's responsibility to be aware of that policy.

It is the student's responsibility to verify administrative drops for excessive absences through MySPC using his or her student online account. If it is determined that a student is awarded financial aid for a class or classes in which the student never attended or participated, the financial aid award will be adjusted in accordance with the classes in which the student did attend/participate, and the student will owe any balance resulting from the adjustment. http://catalog.southplainscollege.edu/content.php?catoid=47&navoid=1229#Class_Attendance

DROPS AND WITHDRAWALS

<http://www.southplainscollege.edu/admission-aid/apply/schedulechanges.php>

ADVISING

<http://www.southplainscollege.edu/admission-aid/advising/spcadvisors.php>

CLINICAL ATTENDANCE POLICIES

Students will adhere to the following clinical attendance policies. It is the responsibility of the student to become familiar with these policies. Ignorance of these policies will not be accepted as an excuse.

- **Clinical attendance is mandatory.** This class meets in the clinical affiliates as assigned. Attendance hours accrue throughout the Program in order to verify completion of the requirements of the Program of Radiologic Technology.
- Punctuality is a necessity in the healthcare setting. The student is required to arrive at the clinical site a few minutes early to be fully prepared to begin the day at 8:00am or 3:00pm. Clinical hours are from **8:00am to 4:30pm or 3:00pm to 11:00pm.**
- The student is required to be present in the assigned area for a total of **16 hours per week.** At the end of the semester, the student will have completed **240 clinical hours.** The first day of clinicals will be *January 14, 2025*, and the last day of clinicals will be *May 1, 2025.*
- Students may miss a total of **24 hours** of clinic **without** it affecting their final grade.
- **A minimum workday is 2 hours (regarding sick time).**
- **Missed clinical hours ARE NOT eligible for make-up, however special considerations for missed clinical hours will be made on a case-by-case basis by the faculty.**
- Missed clinical time due to tardiness, extended lunches, leaving early, funeral leave, doctor appointments, errands and so forth will be added to the total clinical time missed and should be reflected in Trajecsys. An absence is an absence.
- Any absences in excess of the **allowed 24 hours** during the semester will result in failure of the class; therefore, the student will be dropped from the program.
- Once a student has missed **16 hours**, the clinical coordinator will meet with the student to fill out a Student Conference Form that will be put in the student's file. The purpose of this form is to document that the student has been made aware that 16 hours of clinical time has been missed.

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- Trajecsys is used for tracking attendance. Each student is responsible for clocking **himself or herself** in/out.
 - **Trajecsys clock in/outs can be done on cell phones once at the assigned clinical facility.**
 - **No other student is to sign another student in/out.** Falsifying Trajecsys information will be considered academic dishonesty and treated as such in the disciplinary process.
 - **Students must enter a time exception -Forgot- in Trajecsys as soon as possible if he/she has failed to clock in/out.** Notify the SPC clinical coordinator via email as soon as possible that a time exception had to be done.

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- **Students are allowed to clock in up to 10 minutes late. A clock in later than 10 minutes after the scheduled clinical report time will be considered a tardy.** Also, students are allowed to clock in **no earlier** 10 minutes before the scheduled report time.
 - Students are allowed **3 tardies** for the semester. **Each tardy, after the allowed 3, will result in an 8 hour absence.**
 - Once a student incurs **2 tardies**, the clinical coordinator will meet with the student to fill out a Student Conference Form that will be put in the student's file. The purpose of this form is to document that the student has been made aware that two tardies have been accumulated.
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- **In the event that any clinical time has to be missed, the student is required to do three (3) things:** *
 1. Call his or her clinical site and speak to someone directly (no voicemail)
 2. E-mail the clinical coordinator via SPC e-mail
 3. Enter a TIME EXCEPTION – ABSENCE - in Trajecsys
- * The call, e-mail and clock in should be made/done as close to the assigned start time and no later than **2 hours** after the assigned time. **Failure to do any of the above will result in a NO CALL NO SHOW.** If the student knows they will not be in clinic ahead of time, they are allowed to e-mail the clinical coordinator ahead of time.
- **If a student incurs 3 No Call No Shows, the student will be dropped from the program.**
- **Once a student incurs 2 No Call No Shows,** the clinical coordinator will meet with the student to fill out a Student Conference Form that will be put in the student’s file. The purpose of this form is to document that the student has been made aware that 2 no call no shows have been accumulated.
- If the student radiographer leaves the facility early, they must enter a time exception - **Left early (your choice to leave) or Early release (clinical site lets you go early)** - in Trajecsys and e-mail the Clinical Coordinator **that day**. If the student knows they will be leaving early ahead of time, they are allowed to e-mail the clinical coordinator ahead of time. **Failure to do so will also result in a NO CALL NO SHOW.**

- **Students will not be allowed to “work through lunch” and/or come in early or stay late to accrue time or compensate for being absent.**
- If a student shows up to a clinical site without their proper clinical uniform (scrubs, scrub hat (OR, Main/FL), markers, student badge, dosimeter badge, and/or *Merrill’s Pocket Guide to Radiography*), **they must clock out and get missing items and then return to their clinical site where they can clock back in. NO EXCEPTIONS!** The total time away from the clinical site will be deducted from the allowed missed clinical time.
- Due to insurance and scheduling considerations, the student is not to decide his/her own schedule. The Clinical Coordinator will schedule all clinical rotations.
- ***The clinical schedule may change throughout the semester to compensate patient load, student competency, schedule conflicts, and facility requests. The student will be given as much notice as possible to these changes.***
- Additional attendance and absenteeism policies for South Plains College can be found in the program student handbook and the SPC general catalog.

GRADING POLICY

Grade	Criteria	√
A	Missed clinical time did not exceed 24 hours (Fall, Spring) or 14 hours (Summer)	
	Student completed a minimum of 20 of the ARRT required clinical competencies	
	Student received a passing clinical evaluation average of 4.0 to 5.0	
	All clinical documentation submitted on time each assigned due date	
B	Student completed a minimum of 15 of the ARRT required clinical competencies	
	Student received a passing clinical evaluation of 3.0 to 3.9	
	Clinical documentation submitted late on 1-2 assigned due dates (Fall, Spring) or 1 assigned due date (Summer)	
C	Student completed a minimum of 10 of the ARRT required clinical competencies	
	Student received a passing clinical evaluation of 2.0 to 2.9	
	Clinical documentation submitted late on 3-4 assigned due dates (Fall, Spring) or 2 assigned due dates (Summer)	
F	Missed clinical time exceeded 24 hours (Fall, Spring) or 14 hours (Summer)	
	Student failed to complete a minimum of 5 of the ARRT required clinical competencies	
	Student received a failing clinical evaluation of less than 2.0	
	Clinical documentation never submitted on any assigned due date	

*A student must meet all criteria in the category to receive that grade. If one criterion is not met, the grade will be determined by which category it falls under.

A grade average of **C (75) or better** must be maintained in all **radiologic technology courses**.

Failure of a clinical education course will result in the student being withdrawn from the Program.

IF A STUDENT WISHES TO APPEAL A CLINICAL COURSE GRADE, HIS OR HER APPEAL WILL BE PRESENTED TO THE ALLIED HEALTH DIRECTORS.

STUDENT SUPERVISION

Each clinical facility has one or more qualified, ARRT/TMB licensed Clinical instructors. These individuals are responsible for the supervision of the student's clinical education. This includes, but not limited to, scheduling students for the appropriate workflow, assisting students with clinical work, performing competency evaluations, and performing student evaluation.

An ARRT/TMB licensed Radiologic Technologist will supervise all activities of student radiographers.

Student radiographers may have direct and/or indirect supervision.

Direct supervision: all student activities will be carried out with an ARRT/TMB licensed Radiologic Technologist present. **Student radiographers must be directly supervised during all surgical and mobile radiography.**

Indirect supervision: all student activities will be carried out with an ARRT/TMB licensed Radiologic Technologist immediately available. **Indirect supervision radiography may only occur once a student has achieved a competency in that area.**

****If it becomes necessary to repeat ANY radiograph, a qualified staff radiographer must directly supervise the student. THERE ARE NO EXCEPTIONS.**

COMPETENCIES TO BE COMPLETED BY THE COMPLETION OF THE TWO-YEAR PROGRAM:

GENERAL PATIENT CARE PROCEDURES

- CPR Certification (satisfied by Healthcare Provider CPR certification)
- Vital signs (BP, Temperature, Pulse, Respiration & Pulse Oximetry)
- Sterile & Medical Aseptic Technique
- Venipuncture
- Transfer of Patient
- Care of Patient Medical Equipment (e.g., Oxygen Tank, IV Tubing)

CHEST AND THORAX

- Routine Chest
- Chest AP (Wheelchair or Stretcher)
- Ribs
- Chest Lateral Decubitus*
- Sternum*
- Upper Airway (soft-tissue neck) *
- Sternoclavicular Joints*

UPPER EXTREMITY

- Thumb or Finger
- Hand
- Wrist
- Forearm
- Elbow
- Humerus
- Shoulder
- Trauma: Shoulder or Humerus (Scapular Y, Transthoracic or Axial)
- Clavicle
- Scapula*
- AC joints*

- Trauma: Upper Extremity (non-shoulder)

LOWER EXTREMITY

- Toes*
- Foot
- Ankle
- Knee
- Tibia-Fibula
- Femur
- Trauma: Lower Extremity
- Patella*
- Calcaneus *
- Trauma: Lower Extremity

HEAD – Student must do at least one procedure from this section

- Skull*
- Paranasal *
- Facial bones*
- Orbits*
- Nasal bones*
- Mandible *
- Temporomandibular Joints*

VERTEBRAL COLUMN & PELVIS

- Cervical Spine
- Thoracic Spine
- Lumbar Spine
- Cross-Table Lateral Spine (Horizontal Beam)
- Pelvis
- Hip
- Cross-Table Lateral Hip (Horizontal Beam)
- Sacrum and/or Coccyx*
- Scoliosis Series*
- Sacroiliac Joints*

ABDOMEN

- Abdomen Supine (KUB)
- Abdomen Upright
- Abdomen Decubitus *
- Intravenous Urography*

FLUOROSCOPY STUDIES – Students must do two exams from this section

- Upper GI Series, Single or Double Contrast *
- Contrast Enema, Single or Double Contrast*
- Small Bowel Series*
- Esophagus*
- Cystography/Cystourethrography*
- ERCP*
- Myelography*
- Arthrography *
- Hysterosalpingography* (Now done in IR)

MOBILE C-ARM STUDIES

- C-Arm Procedure (Requiring Manipulation to Obtain More Than One Projection)
- Surgical C-Arm Procedure (Requiring Manipulation Around a Sterile Field)

MOBILE RADIOGRAPHIC STUDIES

- Chest
- Abdomen
- Upper or Lower Extremity

PEDIATRIC PATIENT (Age 6 or Younger)

- Chest Routine
- Upper or Lower Extremity*
- Abdomen*
- Mobile Study*

GERIATRIC PATIENT (PHYSICALLY OR COGNITIVELY IMPAIRED AS A RESULT OF AGING)

- Chest Routine
- Upper or Lower Extremity
- Hip or Spine*

*Denotes exams that are electives.

CLINICAL RECORDS

TRAJECSYS

The student is responsible for maintaining electronic clinical records, which is Trajecsys, for the documentation of clinical time, experience evaluations, competencies and repeat record.

CLINICAL RECORDS

The student is responsible for maintaining their own clinical records. **All Trajecsys documentation is due by 8:00 am on the Monday after the scheduled rotation ends.** The following documentation must be provided by the scheduled time:

- ✓ **Time Clock** – Due at the **END OF EACH ROTATION**
- ✓ **Procedure Log** - Due at the **END OF EACH ROTATION**
- ✓ **Evaluations/Sign off** – Due at the **END OF EACH ROTATION**
- ✓ **Competencies** – Due at the **END OF EACH ROTATION**
- ✓ **Repeat Record**– Checked at the **END OF THE SEMESTER**

Failure to submit these forms prevents documentation of required evaluation, clinical time, experience and competency. It will also jeopardize the student's grade. Total disregard to the Program's Clinical Trajecsys documentation guidelines will result in a warning, suspension, or dismissal. **See the grading rubric.**

TIME CLOCK

The **Time Clock** provides a record of time spent at each assigned clinical education setting and will be due at the **end of each rotation**. **The student may clock in/out using their cell phone once at the facility or a computer at the facility.** Please refer to the clinical attendance section for more detail regarding clocking in/out of Trajecsys with cell phone.

PROCEDURE LOG

The *Procedure Log* documents the radiographic procedures experienced by the student and should reflect all experiences seen during any given assigned day. **A procedure log must be done for every day that the student is at clinicals.** The procedure log will be due at the **end of each rotation**. Care should be taken in completing this log to reflect not only experiences in which the student observed and assisted another technologist, but **also** the procedures done unassisted and completed as competencies as well as any repeat radiographs.

EVALUATIONS

Student Evaluations are to be completed by the clinical site technologist(s) that the student has been working with. These are due at the **end of each rotation**. The student must sign off on the completed evaluation. If the student does not sign off on the evaluation by the due date, the evaluation will be late.

Clinical Site Evaluations are to be completed by the student on the clinical site where they have just completed their rotation. These are due at the **end of each rotation**.

CLINICAL COMPETENCIES

The *Clinical Competency Record* will be reviewed during the semester as indicated by the Clinical Coordinator and turned in at the **end of each rotation**. Please see the grading rubric for the number of competencies needed.

CLINICAL REPEAT RECORD

The *Clinical Repeat Record* is completed in the procedure log area. If a repeat is done, you must mark it for that exam. This document provides information that will help the student improve in areas of deficiency. The form is reviewed by the Clinical Coordinator at the **end of each semester**.

Running a weekly report in all categories will keep the student on track to avoid being late in any of those areas

CONFERENCES

If at any time a student is not satisfied with their overall performance, he/she is encouraged to schedule an appointment with me. If necessary, a plan can be developed to help the student improve in their areas of weakness.

COMPUTER USAGE

As computer technology in the field of health occupations continues to become more popular, computers will be used in this course for several assignments. All students have access to open computer labs and printers on the South Plains College campus. Students will be expected to utilize computers to access assignments and classroom resources. All registered students are supplied with a working email account from South Plains College. In order to take exams, students must have their user name and password.

ALL STUDENTS ARE EXPECTED TO KNOW THEIR SPC STUDENT USER NAME AND PASSWORD.

COMPUTER LAB USAGE

The open computer lab(s) on any campus may be used by students during scheduled open hours or as assigned by an instructor. Printer paper will not be provided for students to print materials but students may seek assistance from faculty or staff to request lab paper from the college if needed. Lack of computer lab paper is not an excuse for not having homework assignments, skills lab sheets, or any other required documents. Students should come prepared for class.

SPC COURSE SYLLABUS STATEMENTS

<https://www.southplainscollege.edu/syllabusstatements/>

CAMPUS CONCEALED CARRY

The **following** Penal code goes for all hospital owned property such as clinics, physician's offices, ambulances, and ambulance stations.

Texas Penal Code - PENAL § 30.06. Trespass by License Holder with a Concealed Handgun states that an individual cannot carry a handgun (concealed or open carry) on the premises of a hospital licensed under Chapter 241, Health and Safety Code, or on the premises of a nursing facility licensed under Chapter 242, Health and Safety Code, unless the license holder has written authorization of the hospital or nursing facility administration.

COURSE OUTLINE

CLINICAL ROTATION - ROUTINE RADIOGRAPHY

The student will:

1. Interact with patients, peers and hospital staff in a professional manner. (F15;C9-11,14)
2. Maintain the professional confidentiality of patients, staff and the hospital. (F13,17;C11)
3. Project a professional image in their attire, attitude and conduct. (F14,16,17)
4. Effectively communicate with patients and staff in a professional manner. (F5,6;C5-8,14)
5. Assist in the medical care of the patients while in the radiology department. (C11)
6. Be competent in the correct use of the radiographic equipment and accessories used in the assigned clinical affiliate: (F2,6;C3)
7. Select the proper equipment for a specific radiographic exam. (F13;C3,18,19)
8. Protect the patient, himself/herself and other staff members from unnecessary radiation exposure, using shields, distance, collimation and optimal exposure factors. (F13,17;C3,11,18,19)
9. Identify, orally and/or in writing, and perform, with the supervision of a radiographer, the radiographic projections employed in routine radiography, according to departmental protocol.
10. Position the patient and equipment, and select the appropriate technical factors for the required projections. This will include, but is not limited to the following anatomical regions: (F2,6,10,13; C1,3,4,9,15,18,19)
 - ✓ Upper extremities and shoulder girdle
 - ✓ Lower extremities and pelvic girdle
 - ✓ Thoracic cage
 - ✓ Chest
 - ✓ Abdomen
 - ✓ GI & Urinary
 - ✓ Spinal column
 - ✓ Skull
11. Identify and correct any positioning and/or technical error on processed radiographs, with the supervision of a radiographer. (F9;C3,12,13,16-20)
12. Identify and correct common processor and radiographic equipment problems. (F1,3,8,9;C5-8,15,16,18-20)
13. Assist in the work flow of the department by transporting patients, processing images, and performing clerical duties as required. However, these duties should not occupy the major portion of the student's clinical time.(F1,2,5,6,8,9,13,17;C1,4-9,11-15,18,19)

CLINICAL ROTATION - FLUOROSCOPIC PROCEDURES

The student will:

1. Interact with patients, peers and hospital staff in a professional manner. (F15;C9-11,14)
2. Maintain the professional confidentiality of patients, staff and the hospital. (F13,17;C11)
3. Project a professional image in their attire, attitude and conduct. (F14,16,17;C11)
4. Effectively communicate with patients and staff in a professional manner. (F5,6;C5-8,14)
5. Assist the radiologist by performing the following procedures as they pertain to fluoroscopic examinations:(F11,13;C1,3,9,11,15,18,19)
 - ✓ Setting fluoroscopic technical factors.
 - ✓ Assisting in the positioning of the patient.
 - ✓ Administering contrast media, as is required of the procedure, with orders from the physician and with the supervision of a registered technologist.
 - ✓ Proper placement of the image receptor for spot filming.
 - ✓ Assisting in the care of the patient as required.
 - ✓ Protect the patient from unnecessary radiation exposure.
 - ✓ Protect himself/herself and other health workers from unnecessary radiation exposure.
6. Identify, orally and/or in writing, and perform any overhead projections required following the fluoroscopic procedure (to include equipment positioning, patient positioning, and selection of technical factors). (F2,6,10,13; C1,3,4,9,15,18,19)

SURGERY & PORTABLE RADIOGRAPHY

The student will:

1. Interact with patients, peers and hospital staff in a professional manner. (F15;C9-11,14)
2. Maintain the professional confidentiality of patients, staff and the hospital. (F13,17;C11)
3. Project a professional image in their attire, attitude and conduct. (F14,16,17;C11)
4. Effectively communicate with patients and staff in a professional manner. (F5,6;C5-8,14)
5. Utilize radiation protection procedures necessary in surgical and portable radiography (i.e. Lead aprons and a minimum of 6 feet between the x-ray tube and personnel); and instruct hospital personnel in radiation protection procedures, when necessary. (F13,17;C3,10-12, 15,18,19)
6. Properly enter a surgical suite with knowledge of the sterile area, with attention to appropriate attire for oneself and appropriate preparation of the radiographic equipment to be used. (F13;C3,5,11,15,18,19)
7. Conduct the requested radiographic exam within a sterile environment, without contaminating the surgical field. (F13;C15,18,19)
8. Describe, orally and/or in writing, the responsibilities of the radiographer, perform the procedure under the supervision of a radiographer, and assist the surgeon with any fluoroscopic requirements of the procedure. This will include, but is not limited to: (F2,6,11-13;C3,15,18,19)
 - ✓ Operative cholangiograms
 - ✓ Retrograde pyelograms
 - ✓ Orthopedic procedures
 - ✓ ERCP assistance
 - ✓ Post-operative extremity films
 - ✓ Recovery room radiography
 - ✓ Spinal laminectomies
 - ✓ Pacemaker insertions

✓ Operation of c-arm equipment

9. Identify, orally and/or in writing, and perform the portable procedures with the supervision of a radiographer, by correctly positioning the patient and equipment, and selecting the appropriate technical factors according to the departmental protocol. This will include, but is not limited to the following anatomical regions: (F2,6,13;C3,15,18,19)

- A. Upper extremities and shoulder girdle
- B. Lower extremities and pelvic girdle
- C. Chest
- D. Abdomen
- E. Spinal column
- F. Skull

10. Identify orally and correct any positioning and/or technical errors on the processed portable radiograph and make corrections with the supervision of a radiographer. (F13;C15,18,19)

PEDIATRIC RADIOGRAPHY

The student will:

1. Adjust routine procedures to accommodate pediatric patients, including the positioning of the patient, adjusting equipment and selecting technical factors as appropriate. (F7,8,13;C3,5,15,16,18,19)
2. Perform procedures specific to pediatric patients, to include, but not limited to: (F11-13;C15,18,19)

- ✓ Bone age radiographic exams
- ✓ Long bone radiographic exams
- ✓ Scoliosis radiographic exams
- ✓ Congenital hip malformation radiographic exams
- ✓ Skeletal survey radiographic exams

3. Select appropriate devices to assist in the radiography of pediatric patients, to include, but not limited to: (F8,13;C3,15,18,19)

- ✓ Radiation protection devices
- ✓ Immobilization devices

GERIATRIC RADIOGRAPHY

1. Follows all procedures above for a patient that is physically or cognitively impaired as a result of aging.

SPECIAL PROCEDURES

The student will:

1. Interact and effectively communicate with patients, peers and hospital staff in a professional manner. (F5,15;C5-8, 9-11,14)
2. Maintain the professional confidentiality of patients, staff and the hospital. (F13,17;C11)
3. Project a professional image with appropriate attire, attitude and conduct. (F14,16,17;C11)
4. Identify, orally and/or in writing, the required scout films, contrast media, special equipment, (i.e. Injectors, sterile trays, guide wires, catheters, etc.), patient preparation, patient position and emergency procedure for any special procedure routinely done in that department. This will include, but is not limited to: (F5,6,9-17;C1,3-9,11-20)

- ✓ Myelography
- ✓ Arthrography

- ✓ Venography
 - ✓ Arteriography
5. Prepare the special procedures suite or room, by setting up the necessary equipment and instruments for any special procedure routinely done in that department. This will include, but is not limited to: (F5,6,9,10,13-17;C1,3-9,11-20)
- ✓ Myelography
 - ✓ Arthrography
 - ✓ Venography
 - ✓ Arteriography
6. Describe, orally and/or in writing, and perform, with the supervision of a radiographer and according to departmental protocol, any special procedure routinely done in that department. Assist the radiographer and/or physician with any of these procedures. This will include, but is not limited to: (F5,6,9,10,13-17;C1,3-9,11-20)
- ✓ Myelography
 - ✓ Arthrography
 - ✓ Venography
 - ✓ Arteriography
7. Assist the radiographer and/or physician with the care of the patient while in the special procedures suite/room. (F5,6,13,15;C1,3,5-7,9,11-20)

FOUNDATION SKILLS

BASIC SKILLS—Reads, Writes, Performs Arithmetic and Mathematical Operations, Listens and Speaks

F-1 Reading—locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.

F-2 Writing—communicates thoughts, ideas, information and messages in writing and creates documents such as letters, directions, manuals, reports, graphs, and flow charts.

F-3 Arithmetic—performs basic computations; uses basic numerical concepts such as whole numbers, etc.

F-4 Mathematics—approaches practical problems by choosing appropriately from a variety of mathematical techniques.

F-5 Listening—receives, attends to, interprets, and responds to verbal messages and other cues.

F-6 Speaking—organizes ideas and communicates orally.

THINKING SKILLS—Thinks Creatively, Makes Decisions, Solves Problems, Visualizes and Knows How to Learn and Reason

F-7 Creative Thinking—generates new ideas.

F-8 Decision-Making—specifies goals and constraints, generate alternatives, consider risks, evaluate and chooses best alternative.

F-9 Problem Solving—recognizes problems, devises and implements plan of action.

F-10 Seeing Things in the Mind's Eye—organizes and processes symbols, pictures, graphs, objects, and other information.

F-11 Knowing How to Learn—uses efficient learning techniques to acquire and apply new knowledge and skills.

F-12 Reasoning—discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem.

PERSONAL QUALITIES—Displays Responsibility, Self-Esteem, Sociability, Self-Management, Integrity and Honesty

F-13 Responsibility—exerts a high level of effort and perseveres towards goal attainment.

F-14 Self-Esteem—believes in own self-worth and maintains a positive view of self.

F-15 Sociability—demonstrates understanding, friendliness, adaptability, empathy and politeness in group settings.

F-16 Self-Management–assesses self accurately, sets personal goals, monitors progress and exhibits self-control.

F-17 Integrity/Honesty–chooses ethical courses of action.

SCANS COMPETENCIES

C-1 **TIME** - Selects goal - relevant activities, ranks them, allocates time, prepares and follows schedules.

C-2 **MONEY** - Uses or prepares budgets, makes forecasts, keeps records and makes adjustments to meet objectives.

C-3 **MATERIALS AND FACILITIES** - Acquires, stores, allocates, and uses materials or space efficiently.

C-4 **HUMAN RESOURCES** - Assesses skills and distributes work accordingly, evaluates performances and provides feedback.

INFORMATION - Acquires and Uses Information

C-5 Acquires and evaluates information.

C-6 Organizes and maintains information.

C-7 Interprets and communicates information.

C-8 Uses computers to process information.

INTERPERSONAL–Works with Others

C-9 Participates as a member of a team and contributes to group effort.

C-10 Teaches others new skills.

C-11 Serves Clients/Customers–works to satisfy customer’s expectations.

C-12 Exercises Leadership–communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies.

C-13 Negotiates-works toward agreements involving exchanges of resources; resolves divergent interests.

C-14 Works With Diversity–works well with men and women from diverse backgrounds.

SYSTEMS–Understands Complex Interrelationships

C-15 Understands Systems–knows how social, organizational, and technological systems work and operates effectively with them.

C-16 Monitors and Corrects Performance–distinguishes trends, predicts impacts on system operations, diagnoses systems performance and corrects malfunctions.

C-17 Improves or Designs Systems–suggests modifications to existing systems and develops new or alternative systems to improve performance.

TECHNOLOGY–Works with a Variety of Technologies

C-18 Selects Technology–chooses procedures, tools, or equipment, including computers and related technologies.

C-19 Applies Technology to Task–understands overall intent and proper procedures for setup and operation of equipment.

C-20 Maintains and Troubleshoots Equipment–prevents, identifies, or solves problems with equipment, including computers and other technologies.